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PROCUREMENT SECTION  
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# ***WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO***

Prepared by  
**U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE**

Collaborating with  
**COLORADO STATE UNIVERSITY EXPERIMENT STATION  
STATE ENGINEER of COLORADO  
and STATE ENGINEER of NEW MEXICO**

Data included in this report were obtained by the agencies named above in cooperation with the Bureau of Reclamation, U.S. Forest Service, National Park Service, Corps of Engineers and other Federal, State and private organizations.

AS OF  
**MAY 1, 1973**

## TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

## PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 511 N. W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 970, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84111
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

## PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia



# **WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO**

and  
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

*Issued by*

**KENNETH E. GRANT**

ADMINISTRATOR  
SOIL CONSERVATION SERVICE  
WASHINGTON, D.C.



*Released by*

**M. D. BURDICK**

STATE CONSERVATIONIST  
SOIL CONSERVATION SERVICE  
DENVER, COLORADO

**MARION E. STRONG**

STATE CONSERVATIONIST  
SOIL CONSERVATION SERVICE  
ALBUQUERQUE, NEW MEXICO

*In Cooperation with*

**JOHN PATRICK JORDAN**

DIRECTOR  
C S U  
EXPERIMENT STATION

**S. E. REYNOLDS**

STATE ENGINEER  
STATE OF NEW MEXICO

**C. J. KUIPER**

STATE ENGINEER  
STATE OF COLORADO



*Report prepared by*

**JACK N. WASHICHEK, Snow Survey Supervisor**

and

**RONALD E. MORELAND, Assistant Snow Survey Supervisor**

SOIL CONSERVATION SERVICE  
SNOW SURVEY UNIT  
P.O. BOX 17107  
DENVER, COLORADO 80217



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### WATERSHED II - ARKANSAS RIVER WATERSHED

Describes water supply conditions in Lake County, Upper Arkansas, Fremont, Custer County Divide, Fountain Valley, Black Squirrel, Horse-Rush Creek, Central Colorado, Turkey Creek, Pueblo, Bessemer, Olney Boone, Cheyenne, Upper Huerfano, Stanewall, Spanish Peaks, Purgatoire, Branson Trinchero, Western Baca, Southeastern Baca, Two Buttes, Bent, Timpani, Northeast Prowers, Prowers, Kiowa County, West Otero, East Otero, and Big Sandy Soil Conservation Districts.

### WATERSHED III - RIO GRANDE WATERSHED (COLORADO)

Describes water supply conditions in Rio Grande, Center, Conejos, Mosca Hooper, Mt. Blanca, Sanchez, and Culebra Soil Conservation Districts.

### WATERSHED IV - RIO GRANDE WATERSHED (NEW MEXICO)

Describes water supply conditions in Upper Chama, East Rio Arriba, Taos, Lindero, Jemez, Santa Fe - Pojoaque, Sandoval, Tijeras, Cuba, and Edgewood Soil Conservation Districts.

### WATERSHED V - DOLORES, SAN JUAN, AND ANIMAS RIVERS WATERSHED

Describes water supply conditions in San Miguel Basin. Dove Creek, Dolores, Montez, LaPlata, Pine River, San Juan, San Miguel Basin, and Glade Park Soil Conservation Districts.

### WATERSHED VI - GUNNISON RIVER WATERSHED

Describes water supply conditions in Delta, Gunnison, Cimarron, Shavano, and Uncampahgre Soil Conservation Districts.

### WATERSHED VII - COLORADO RIVER WATERSHED

Describes water supply conditions in DeBeque, Plateau Valley, Lower Grand Valley, Bookcliff, Eagle County, Middle Park, Glade Park, Upper Grand Valley, South Side, and Mt. Sopris Soil Conservation Districts.

### WATERSHED VIII - YAMPA, WHITE AND NORTH PLATTE RIVERS WATERSHED

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# WATER SUPPLY OUTLOOK

as of

May 1, 1973



GENERALLY ADEQUATE  
100% OR MORE



LIMITED SHORTAGE  
75% - 100%



SEVERE SHORTAGE  
75% OR LESS



The map on this page indicates the most probable water supply as of the date of this report. Estimates assume average conditions of snow fall, precipitation and other factors from this date to the end of the forecast period. As the season progresses accuracy of estimates improve. In addition to expected streamflow, reservoir storage, soil moisture in irrigated areas, and other factors are considered in estimating water supply. Estimates apply to irrigated areas along the main streams and may not indicate conditions on small tributaries.



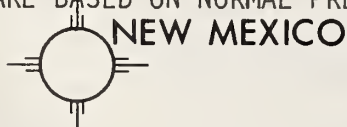
# WATER SUPPLY CONDITIONS as of

May 1, 1973

THE SNOWPACK INCREASED IN BOTH STATES MORE THAN THE 15 YEAR NORMAL DURING APRIL. THIS MAY REFLECT THE BELOW AVERAGE TEMPERATURES AND LACK OF ANY SNOWMELT. SNOWFALL DURING THE LAST WEEK OF APRIL WAS VERY GENERAL AND HEAVY AT THE LOWER ELEVATIONS. WATER SUPPLIES WILL BE ADEQUATE IN BOTH STATES. SOIL IN THE IRRIGATED AREAS OF BOTH STATES ARE WET -- SO WET IN SOME AREAS THAT PLANTING IS IMPOSSIBLE.



STREAMS SHOULD PROVIDE ADEQUATE WATER OVER THE ENTIRE STATE. SOME HIGH WATER CAN BE EXPECTED IN THE RIO GRANDE, SAN JUAN, ANIMAS, DOLORES AND GUNNISON DRAINAGES. THE EXTENT OF HIGH WATER WILL DEPEND UPON TEMPERATURES AND PRECIPITATION DURING SNOWMELT. ALL AREAS REPORT THE IRRIGATED AREAS AS WET OR TOO WET. THE SOUTH PLATTE AREAS HAVE GOOD STORAGE. OTHER AREAS ARE NEAR NORMAL EXCEPT ARKANSAS. THE ARKANSAS BASIN WILL HAVE TO DEPEND HEAVILY UPON STREAMFLOW OR PUMPING FOR MOST IRRIGATION. FORECASTS ARE BASED ON NORMAL PRECIPITATION FOR THE REMAINDER OF THE YEAR.










STREAMFLOW SHOULD BE MUCH ABOVE NORMAL ON ALL OF THE SNOW-FED STREAMS IN NEW MEXICO. SOME OF THE SNOWPACK IS A MAXIMUM OF RECORD. HIGH WATER CAN BE EXPECTED ON THE SAN JUAN, PECOS, THE RIO GRANDE MAINSTEM AND ITS TRIBUTARIES. PROBABLY ALL STREAMS IN THE NORTHERN THIRD OF THE STATE WILL HAVE SOME HIGH WATER. TEMPERATURES AND PRECIPITATION DURING THE SNOW-MELT PERIOD WILL DICTATE FLOWS. SOILS ARE EXTREMELY WET IN BOTH VALLEYS AND MOUNTAINS. CARRY-OVER STORAGE IS GOOD.



May 1, 1973

[illegible]

### LEGEND

- |   |                                    |
|---|------------------------------------|
|  | Highway                            |
|  | Drainage                           |
|  | Town                               |
|  | Watershed Boundary                 |
|  | Generally Adequate<br>100% or more |
|  | Limited Shortage<br>75% - 100%     |
|  | Severe Shortage<br>75% or less     |

## YOUR WATER SUPPLY

WATER SUPPLIES SHOULD BE ADEQUATE ON THE UPPER SOUTH PLATTE. ALL STREAMS ARE BEING FORECAST AT NEAR THE 1953-67 AVERAGE. CARRY-OVER STORAGE IS EXCELLENT AND SHOULD PROVIDE GOOD SUPPLEMENTAL SUPPLIES IN AREAS WHERE STREAMFLOW IS NOT ADEQUATE. SNOWPACK IS NOW CONSIDERABLY ABOVE NORMAL, BUT ONLY AT LOW ELEVATIONS. PERSISTENT WARM TEMPERATURES COULD BRING THIS WATER DOWN RAPIDLY.

*This report prepared by*

JACK N. WASHICHEK and RONALD E. MORELAND  
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE  
DENVER, COLORADO

- Issued by

M. O. BUROICK---STATE CONSERVATIONIST      JACK L. HALL---AREA CONSERVATIONIST  
U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE  
DENVER, COLORADO      DENVER, COLORADO

## *The Conservation of Water begins with the Snow Survey*

# STREAMFLOW FORECASTS (1000 Ac. Ft.)

Apr-Sept

# WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

FORECAST POINT	FORECAST	% of Average	Average <sup>+</sup>
Big Thompson at Drake (1)	95	95	100
Boulder at Orodell	48	99	49
Cache La Poudre at Canyon Mouth (2)	220	102	215
Clear Cr. at Golden (3)	120	101	119
St. Vrain at Lyons (4)	70	100	70

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Bear Creek	Exc.	Avg.
Coal Creek	Exc.	Avg.
North Fork of South Platte	Exc.	Avg.
North Fork of Cache La Poudre	Exc.	Avg.
Ralston Creek	Exc.	Avg.
Rock Creek	Exc.	Avg.

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow minus diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

## SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average <sup>+</sup>
Big Thompson	4	104	109
Boulder	3	159	132
Cache La Poudre	8	144	166
Clear Creek	6	131	106
Saint Vrain	3	183	148
South Platte	3	100	122

## SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average <sup>+</sup>
Big Thompson	2	86	83
Boulder	1	87	118
Cache La Poudre	2	71	75
Clear Creek	2	91	94
Saint Vrain	2	77	95
South Platte	2	87	87

## RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average <sup>+</sup>
Antero	33.0	15.9	15.9	10.6
Barr Lake	32.2	28.0	26.8	23.0
Black Hollow	8.0	4.5	4.8	3.5
Boyd Lake	44.0	37.5	36.4	27.7
Cache La Poudre	9.5	8.8	8.2	8.0
Carter Lake	108.9	106.0	107.2	86.4
Chambers Lake	8.8	5.0	2.3	3.3
Cheesman	79.0	56.5	74.0	50.2
Cobb Lake	34.0	20.1	20.1	9.8
Eleven Mile	97.8	91.7	81.0	72.9
Fossil Creek	11.6	10.3	8.1	7.0
Gross	43.1	19.7	18.3	17.4

## RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average <sup>+</sup>
Halligan	6.4	6.4	4.3	5.6
Horsetooth	143.5	130.0	134.0	116.9
Lake Loveland	14.3	10.9	12.2	9.0
Lone Tree	9.2	8.9	8.0	7.9
Mariano	5.4	5.7	5.2	2.0
Marshall	10.3	5.6	6.5	4.0
Marston	18.0	16.5	14.7	15.5
Milton	24.4	18.1	18.1	11.0
Standley	42.0	28.1	31.1	11.9
Terry Lake	8.2	6.3	5.9	5.3
Union	12.7	10.9	12.1	8.0
Windsor	18.6	14.8	13.6	14.7

\*1953-1967 period.

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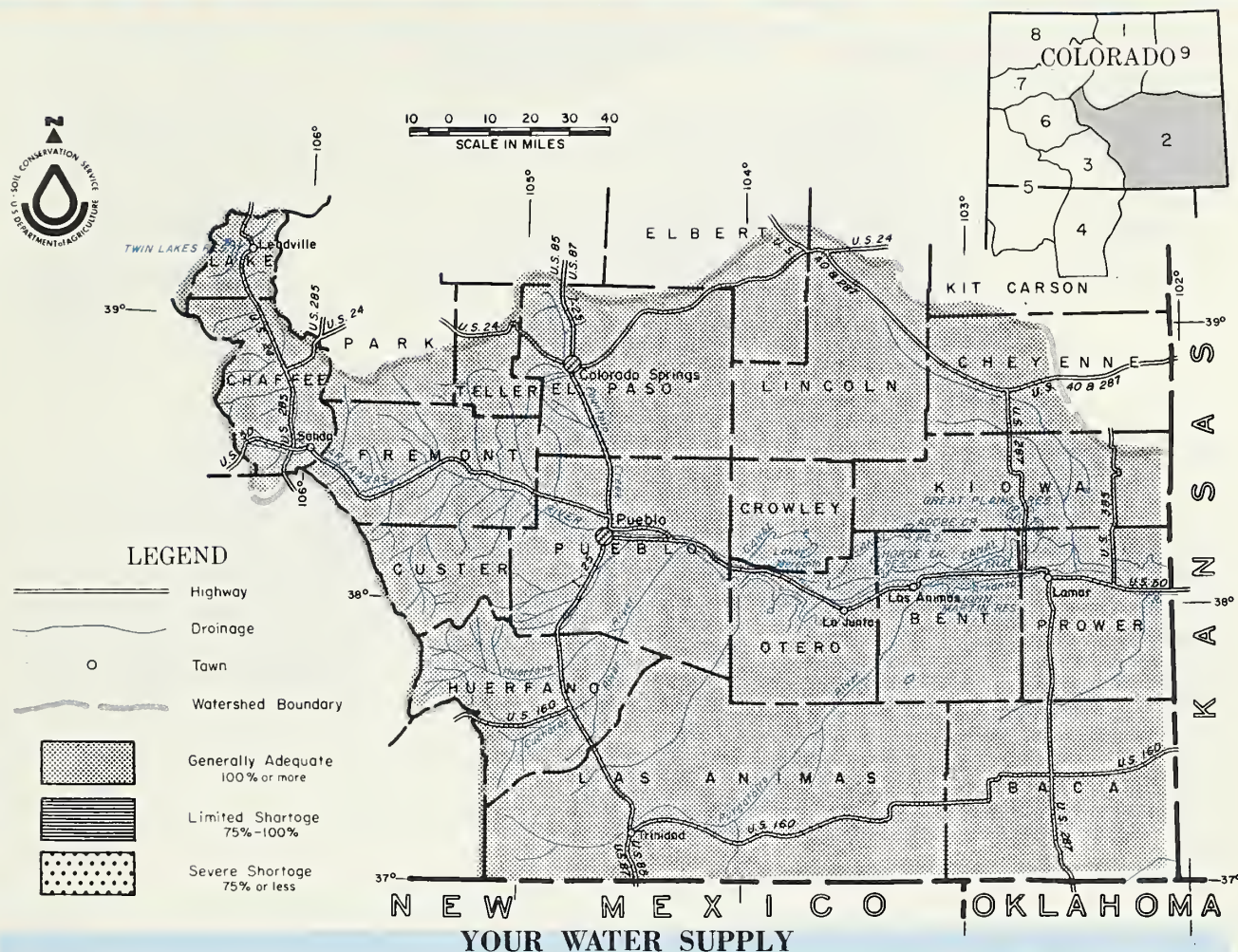
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"The Conservation of Water begins with the Snow Survey"



as of  
May 1, 1973

**U.S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE**  
**CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO**



WATER SUPPLIES SHOULD BE ADEQUATE IN THE ARKANSAS DRAINAGE THIS SUMMER. FORECASTS WERE INCREASED SLIGHTLY DURING THE MONTH AND NOW RANGE FROM 123 PERCENT OF NORMAL ON THE MAINSTEM TO 167 PERCENT ON THE CUCCHARAS. FLOW ON THE SMALL TRIBUTARIES SHOULD ALSO BE ADEQUATE. SOIL MOISTURE CONDITIONS ARE LISTED AS EXCELLENT. SOME OBSERVERS INDICATED TOO MUCH MOISTURE FOR PLANTING. CARRY-OVER STORAGE IS POOR. WATER SUPPLIES WILL COME PRINCIPALLY FROM STREAMFLOW AND PUMPING.

*This report prepared by*

JACK N. WASHICHEK and RONALD E. MORELAND  
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE  
DENVER, COLORADO

Issued by

M. O. BURDICK---STATE CONSERVATIONIST  
U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE  
DENVER, COLORADO

W.O. McCORKLE---AREA CONSERVATIONIST  
LA JUNTA, COLORADO

## *The Conservation of Water begins with the Snow Survey*



# STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average <sup>+</sup>
Arkansas nr Pueblo (1)	375	126	298
Arkansas nr Salida (1)	380	123	309
Cucharas nr La Veta	20	167	12
Purgatoire at Trinidad	60	130	46

(1) Observed flow plus change in Clear Creek, Twin Lakes and Turquoise Reservoirs minus diversions through Bask Ivanhoe, Boustead, Divide, Twin Lakes and Homestake Tunnels and Ewing, Front Pass, Wurtz and Columbine ditches.

## SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average <sup>+</sup>
Arkansas	10	155	142
Cucharas	2	---	1370
Purgatoire	1	---	540

# WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Apishapa	Exc.	Avg.
Fountain Creek	Exc.	Avg.
Grape	Exc.	Avg.
Hardscrable	Exc.	Avg.
Huerfano	Exc.	Avg.
Monument Creek	Exc.	Avg.

## SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average <sup>+</sup>
Arkansas	3	131	104
Cucharas and Purgatoire	1	94	83

## RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average <sup>+</sup>
Adobe	61.6	0.0	12.1	10.6
Clear Creek	11.4		5.0	6.4
Cucharas	40.0	0.0	0.0	35.9
Great Plains	150.0	48.2	45.4	35.9
Horse Creek	26.9	0.0	0.0	4.7

## RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average <sup>+</sup>
John Martin	353.9	40.9	0.0	67.9
Meredith	41.9	22.6	7.2	9.3
Model	15.0		0.9	2.4
Turquoise	130.0	50.7	56.3	6.2
Twin Lakes	57.9	26.9	19.2	17.7

+ 1953-1967 period.

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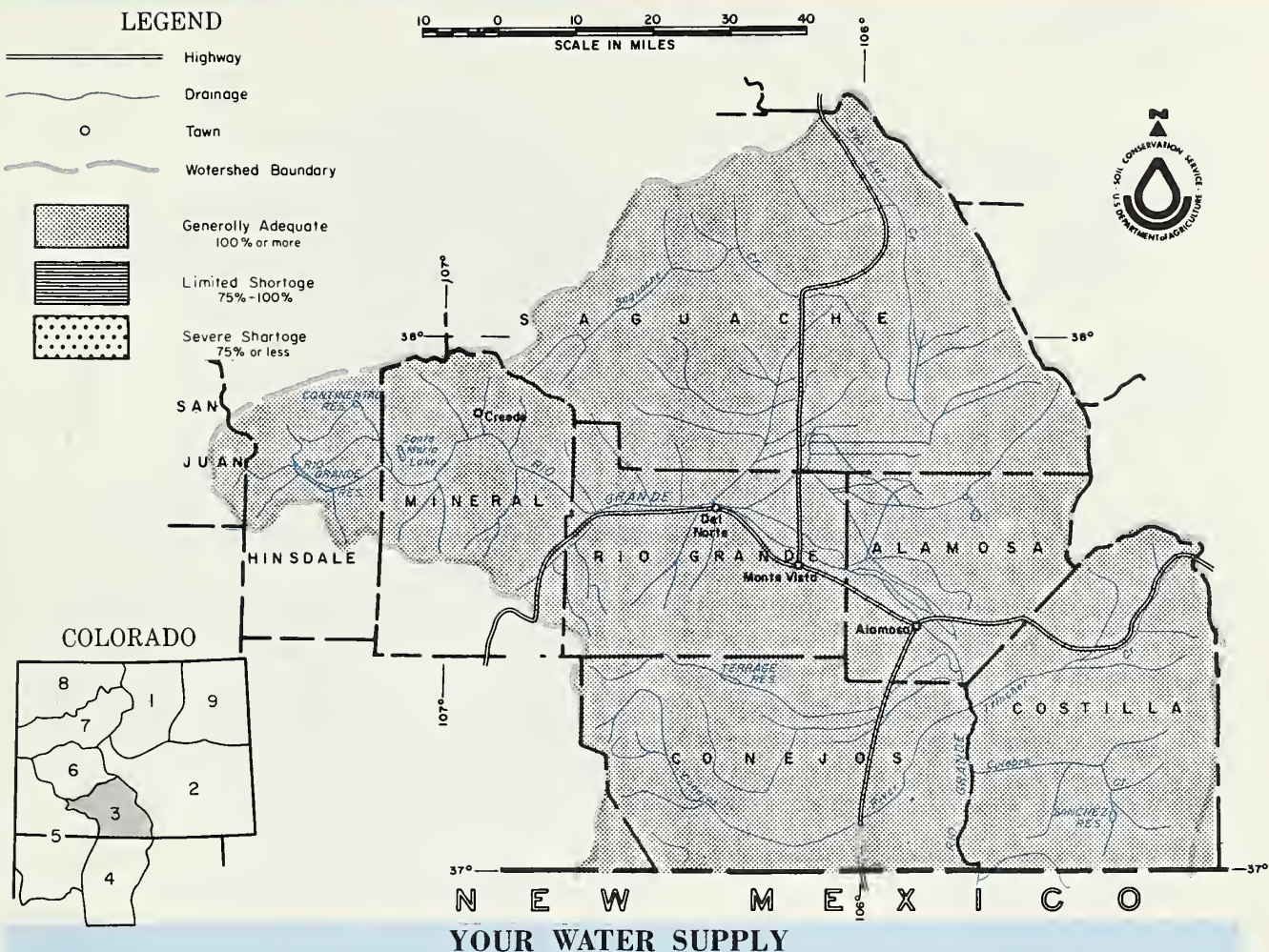
"The Conservation of Water begins with the Snow Survey"

# WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE UPPER RIO GRANDE WATERSHED IN COLORADO

as of

May 1, 1973

**U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE**  
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



STREAMFLOW FORECASTS WERE RAISED AGAIN THIS MONTH. FORECASTS NOW RANGE UPWARDS FROM 150 PERCENT OF THE 15 YEAR NORMAL. LOW ELEVATION SNOWS ARE SLOW TO MELT. SOME HIGH WATER IS LIKELY EVEN IF TEMPERATURES ARE NORMAL. TEMPERATURES AND PRECIPITATION WILL PLAY A LARGE PART IN THE RUNOFF THIS YEAR. VALLEY SOILS ARE EXTREMELY WET. RESERVOIR STORAGE IS SLIGHTLY BETTER THAN NORMAL.

This report prepared by

JACK N. WASHICHEK and RONALD E. MORELAND  
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE  
DENVER, COLORADO

Issued by

M. D. BUROICK—STATE CONSERVATIONIST KENNETH A. PITNEY—AREA CONSERVATIONIST  
U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE  
DENVER, COLORADO DURANGO, COLORADO

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# STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORECAST	% of Average	Average +
Alamosa abv Terrace	93	150	62
Conejos nr Mogote (1)	270	148	182
Culebra at San Luis(2)	36	189	19
Rio Grande at 30 Mile Bridge (3)	183	156	117
Rio Grande nr Del Norte (3)	680	155	438
South Fork at South Fork	175	159	110

(1) Observed flow plus change in storage in Platoro Reservoir. (2) Observed flow plus change in storage in Sanchez Reservoir. (3) Observed flow plus change in storage in Santa Maria, Rio Grande and Continental Reservoirs.

## SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average +
Alamosa	2	232	196
Conejos	3	---	232
Culebra	2	---	625
Rio Grande	10	311	187

## RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average +
Continental	26.7	6.1	6.2	5.8
Platoro	60.0	2.9	4.4	8.1
Rio Grande	45.8	21.0	18.0	15.0

# WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Saguache Creek	Exc.	Exc.
Sangre de Cristo Cr.	Exc.	Exc.
Trinchera	Exc.	Exc.

## SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average +
Alamosa	2	91	87
Conejos	1	91	73
Culebra	1	94	83
Rio Grande	2	93	91

## RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average +
Sanchez	103.2		7.3	12.3
Santa Maria	45.0	5.8	6.6	6.9
Terrace	17.7	6.8	6.7	5.7

+ 1953-1967 period.

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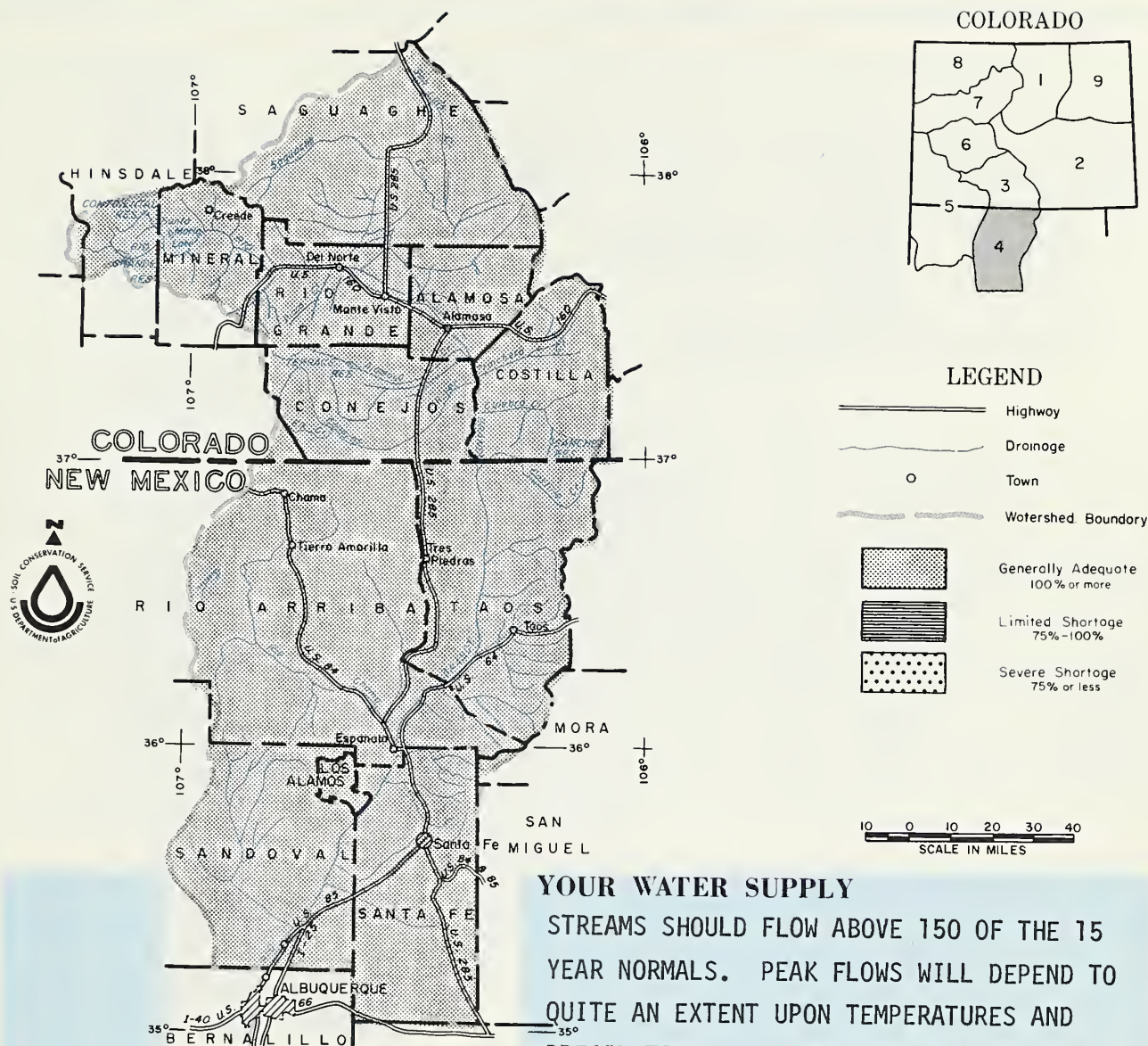
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# WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE RIO GRANDE WATERSHED IN NEW MEXICO

as of  
May 1, 1973

**U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE**  
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



This report prepared by

JACK N. WASHICHEK and RONALD E. MORELANO  
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE  
DENVER, COLORADO

Issued by

MARION E. STRONG—STATE CONSERVATIONIST  
JOHN WERNER—AREA CONSERVATIONIST  
U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE  
ALBUQUERQUE, NEW MEXICO  
SANTA FE, NEW MEXICO

*The Conservation of Water begins with the Snow Survey*

# STREAMFLOW FORECASTS (1000 Ac. Ft.) Mar-Jul

FORECAST POINT	FORECAST	% of Average	Average <sup>+</sup>
Costilla at Cost. (1)	33	180	18
Pecos at Pecos	90	220	41
Rio Chama at El Vado	305	162	188
Rio Grande at Otowi(2)	885	172	513
Rio Grande at San Mar. (2)	690	207	334
Rio Hondo nr Valdez	26	173	15
Red River at Mouth nr Questa	52	163	32

The forecast of the Rio Grande at San Marcial is % of the Average used by the Elephant Butte Irrigation District. (1) Observed flow plus change in Costilla Reservoir. (2) Observed flow plus change in storage in El Vado and Abiquiu Reservoir.

# WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Embudo Creek	Exc.	Exc.
Jemez River	Exc.	Exc.
Mora River	Exc.	Exc.
Nambe Creek	Exc.	Exc.
Rio Ojo Caliente	Exc.	Exc.
Rio Pueblo de Taos	Exc.	Exc.
Santa Fe Creek	Exc.	Exc.

## SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average <sup>+</sup>
Snow not normally measured May 1.			

## SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average <sup>+</sup>

## RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average <sup>+</sup>
Alamogordo	111	100	4	64
Caballo	344	72	41	75
Conchas	273	189	68	150
Elephant Butte	2195	385	172	322

## RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average <sup>+</sup>
El Vado	195	74	8	31
McMillen-Avalon	32	20	20	12

<sup>+</sup> 1953-1967 period.

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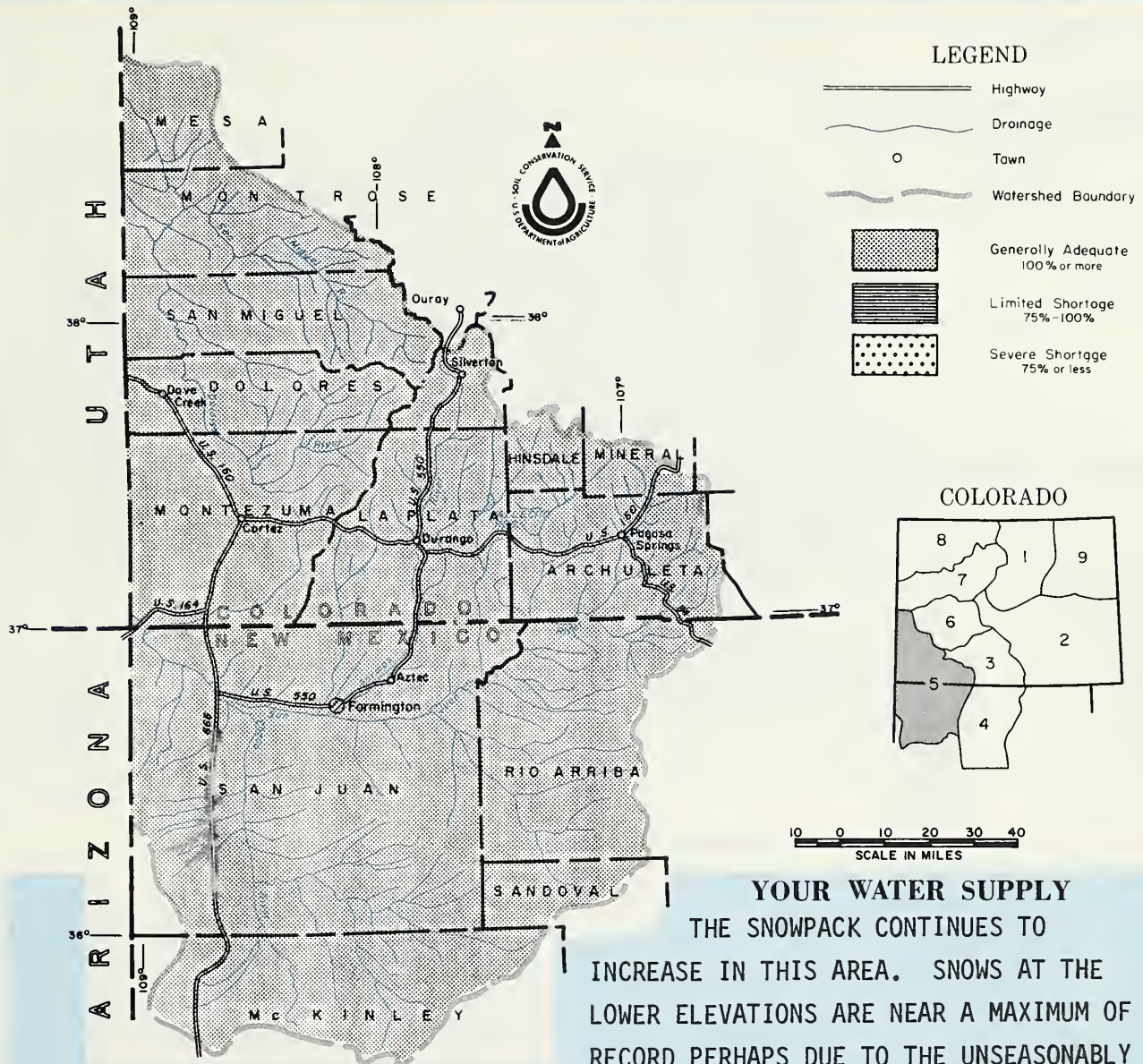
# FIRST CLASS MAIL



# WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE SAN MIGUEL, DOLORES, ANIMAS, AND SAN JUAN WATERSHEDS IN COLORADO AND NEW MEXICO

as of  
May 1, 1973

**U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE**  
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



This report prepared by

JACK N. WASHICHEK and RONALD E. MORELAND  
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE  
DENVER, COLORADO

Issued by

M. O. BURDICK—STATE CONSERVATIONIST  
DENVER, COLORADO  
MARION E. STRONG—STATE CONSERVATIONIST  
ALBUQUERQUE, NEW MEXICO  
U. S. DEPARTMENT OF AGRICULTURE — SOIL CONSERVATION SERVICE  
KENNETH A. PITNEY—AREA CONSERVATIONIST  
DURANGO, COLORADO  
JOHN WERNER —AREA CONSERVATIONIST  
SANTA FE, NEW MEXICO

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FORECAST POINT	FORE-CAST	% of Average	Average
Animas at Durango	675	150	409
Dolores at Dolores	380	165	231
La Plata at Hesperus	40	167	24
Los Pinos at Bayfield	305	157	194
(1)			
Piedra Cr. at Piedra	260	160	163
San Juan at Carracas	625	165	379
Inflow to Navajo Res.	1050	170	619
(1) (Apr-Jul)			

(1) Observed flow plus change in storage in Vallecito Reservoir.

(1) Observed flow plus change in storage in Vallicito Reservoir.

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average
Animas	6	315	190
Dolores	4	1800	271
San Juan	3	301	158

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Florida	Exc.	Exc.
Mancos	Exc.	Exc.
San Miguel	Exc.	Exc.

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average †
Animas	3	101	88
Dolores	3	178	105
San Juan	3	101	88

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average
Groundhog	22	7	12	9
Lemon	40	16	26	19
Narraguinnep		16		
Navajo	1696	1170	847	326
Vallecito	126	58	79	59

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average

+ 1953-1967 period.

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# WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE GUNNISON RIVER WATERSHED IN COLORADO

as of  
May 1, 1973

**U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE**  
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



## YOUR WATER SUPPLY

THE SNOWPACK INCREASED FANTASTICALLY DURING APRIL. SOME AREAS INCREASED AS MUCH AS 60 PERCENT. IT IS FELT THESE INCREASES MAY BE DUE IN PART TO THE COLD TEMPERATURES. THERE WAS LITTLE SNOWMELT. STREAMFLOW WAS GENERALLY BELOW NORMAL. THERE WILL BE ADEQUATE WATER OVER THE BASIN. FORECASTS WERE INCREASED IN SOME CASES AS MUCH AS 40 PERCENT. CARRY-OVER RESERVOIR STORAGE IS SIMILAR TO LAST YEAR, BUT SLIGHTLY LESS. VALLEY SOILS ARE IN GOOD CONDITION.

This report prepared by

JACK N. WASHICKE and RONALD E. MORELAND  
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE  
DENVER, COLORADO

Issued by

M. O. BUIROCK—STATE CONSERVATIONIST R. L. PORTER—AREA CONSERVATIONIST  
U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE  
DENVER, COLORADO GLENWOOD SPRINGS, COLORADO

*The Conservation of Water begins with the Snow Survey*



# STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORECAST	% of Average	Average <sup>+</sup>
Gunnison R. inflow to Blue Mesa (1)	850	111	767
Gunnison nr Grand Junction (2)	1800	158	1137
N. Fork of Gunnison(3)	370	143	258
Surface Creek nr Cedaridge	22	138	16
Uncompahgre at Colona	200	155	129

(1) Observed flow plus change in storage in Taylor Reservoir. (2) Observed flow plus change in storage in Blue Mesa, Morrow Point and Taylor Reservoirs. (3) Observed flow plus change in storage in Paonia Reservoir.

## SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average <sup>+</sup>
Gunnison	12	273	160
Surface Creek	3	237	153
Uncompahgre	3	236	177

# WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Taylor	Exc.	Exc.

## SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average <sup>+</sup>
Gunnison	1	126	126
Surface Creek	1	110	122
Uncompahgre	1	110	122

## RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average <sup>+</sup>
Blue Mesa	830	305	319	--
Morrow Point	121	115	116	--
Taylor	106	42	77	59

## RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average <sup>+</sup>

+ 1953-1967 period.

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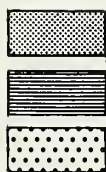
# WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE COLORADO RIVER WATERSHED IN COLORADO

as of  
May 1, 1973

**U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE**  
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

## LEGEND

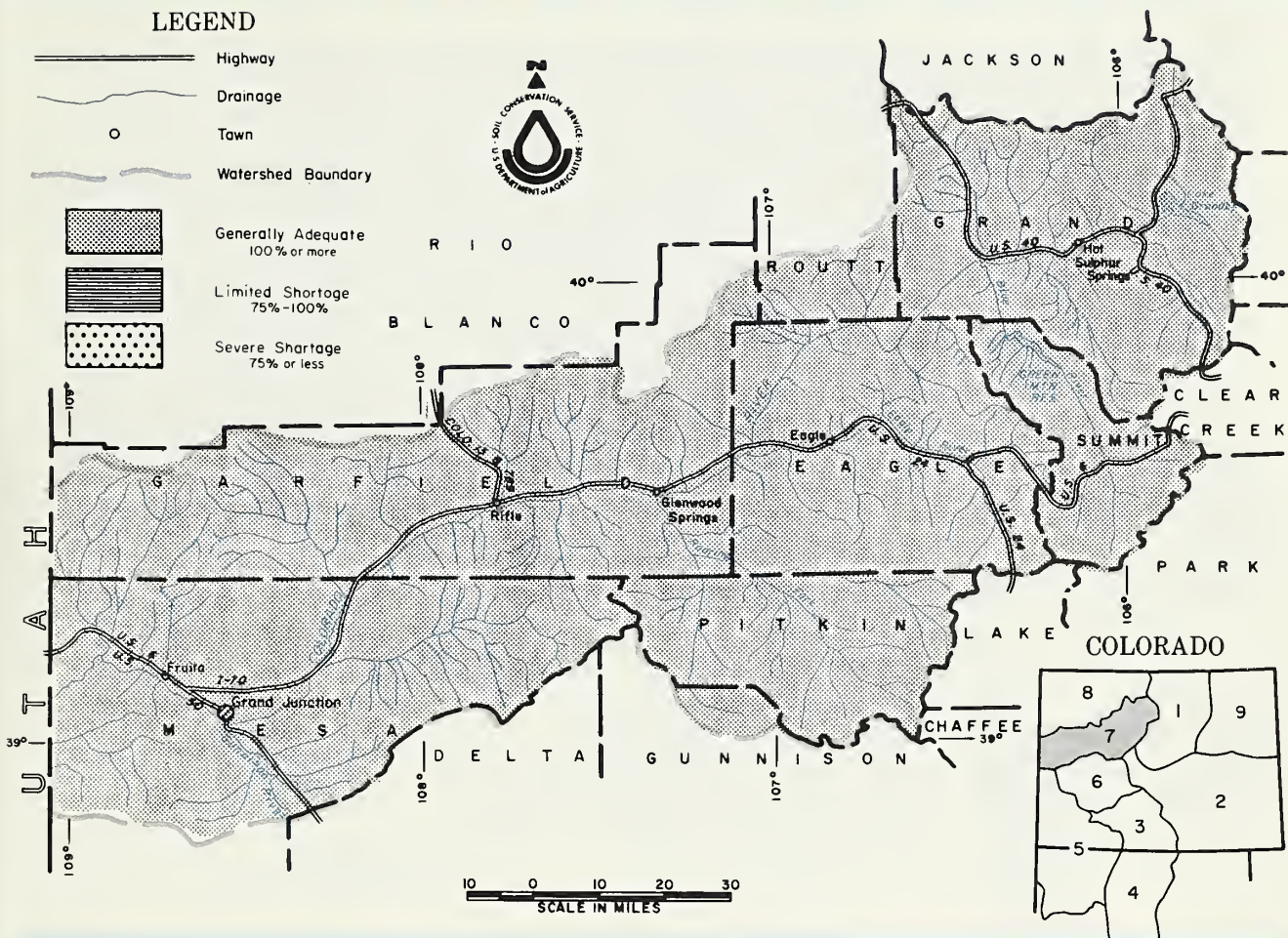
-  Highway
-  Drainage
-  Town
-  Watershed Boundary



Generally Adequate  
100% or more

Limited Shortage  
75%-100%

Severe Shortage  
75% or less



## YOUR WATER SUPPLY

STREAMFLOW FORECASTS WERE RAISED 10 TO 15 PERCENT AS OF MAY 1. THE SNOWPACK IN SOME PLACES INCREASED AS MUCH AS 60 PERCENT DURING THE MONTH OF APRIL. SINCE THE MONTH WAS QUITE COLD, PROBABLY SNOWMELT WAS AT A MINIMUM ACCOUNTING FOR THE LARGE SNOWPACK INCREASE. THERE SHOULD BE NO WATER SHORTAGES THIS SUMMER. VALLEY SOILS ARE WET. RESERVOIR CARRY-OVER STORAGE IS BETTER THAN NORMAL OVER THE BASIN.

This report prepared by

JACK N. WASHICHEK and RONALD E. MORELAND  
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE  
DENVER, COLORADO

Issued by

M. D. BURDICK  
STATE CONSERVATIONIST  
U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE  
DENVER, COLORADO

R. L. PORTER  
AREA CONSERVATIONIST

GLENWOOD SPRINGS, COLORADO

*The Conservation of Water begins with the Snow Survey*

# STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORECAST	% of Average	Average <sup>†</sup>
Blue inflow to Dillon	145	95	153
Blue abv Green Mt.(1)	225	95	236
Colo. R. inflow to Granby Res. (2)	220	100	219
Colo. R. nr Dotsero(3)	1600	116	1375
Roaring Fork at Glenwood Springs (4)	900	130	692
Williams Fork nr Par. (5)	65	108	60
Willow Creek inflow to Willow Cr. Reservoir	53	115	46
Colo. nr Cameo (6)	2500	113	2216

(1) Observed flow plus diversions through Roberts Tunnel and change in storage in Dillon Reservoir. (2) Observed flow corrected for change in storage in Lake Granby as furnished by U.S.B.R. and diversions by Adams Tunnel and Grand River Ditch. (3) Observed flow plus the changes as indicated in (1), (2) and (5) plus Moffat Ditch and change in Homestake, Williams Fork, Green Mt. and Willow Creek Reservoirs. (4) Observed flow plus diversions through Divide and Twin Lakes Tunnels plus change in storage in Ruedi Reservoir. (5) Observed flow plus diversions through August P. Gumlick Tunnel. (6) Observed flow plus the changes as indicated in (3) and (4).

## SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average <sup>†</sup>
Blue River	8	104	107
Colorado	21	134	132
Plateau	3	212	145
Roaring Fork	5	223	165
Williams Fork	3	169	151
Willow	2	188	143

# WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Brush	Exc.	Avg.
Eagle River	Exc.	Avg.
Gypsum Creek	Exc.	Avg.

## SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average <sup>†</sup>
Blue River	1	117	113
Colorado	5	99	98
Roaring Fork	1	95	100
Willow	2	188	143

## RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average <sup>†</sup>
Dillon	254	219	236	233
Granby	466	381	319	205
Green Mountain	147	66	51	43
Homestake	43	18	3	---

## RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average <sup>†</sup>
Ruedi	101	54	61	--
Vega	32	16	18	13
Williams Fork	97	56	56	34
Willow Creek	9	7	7	--

+ 1953-1967 period.

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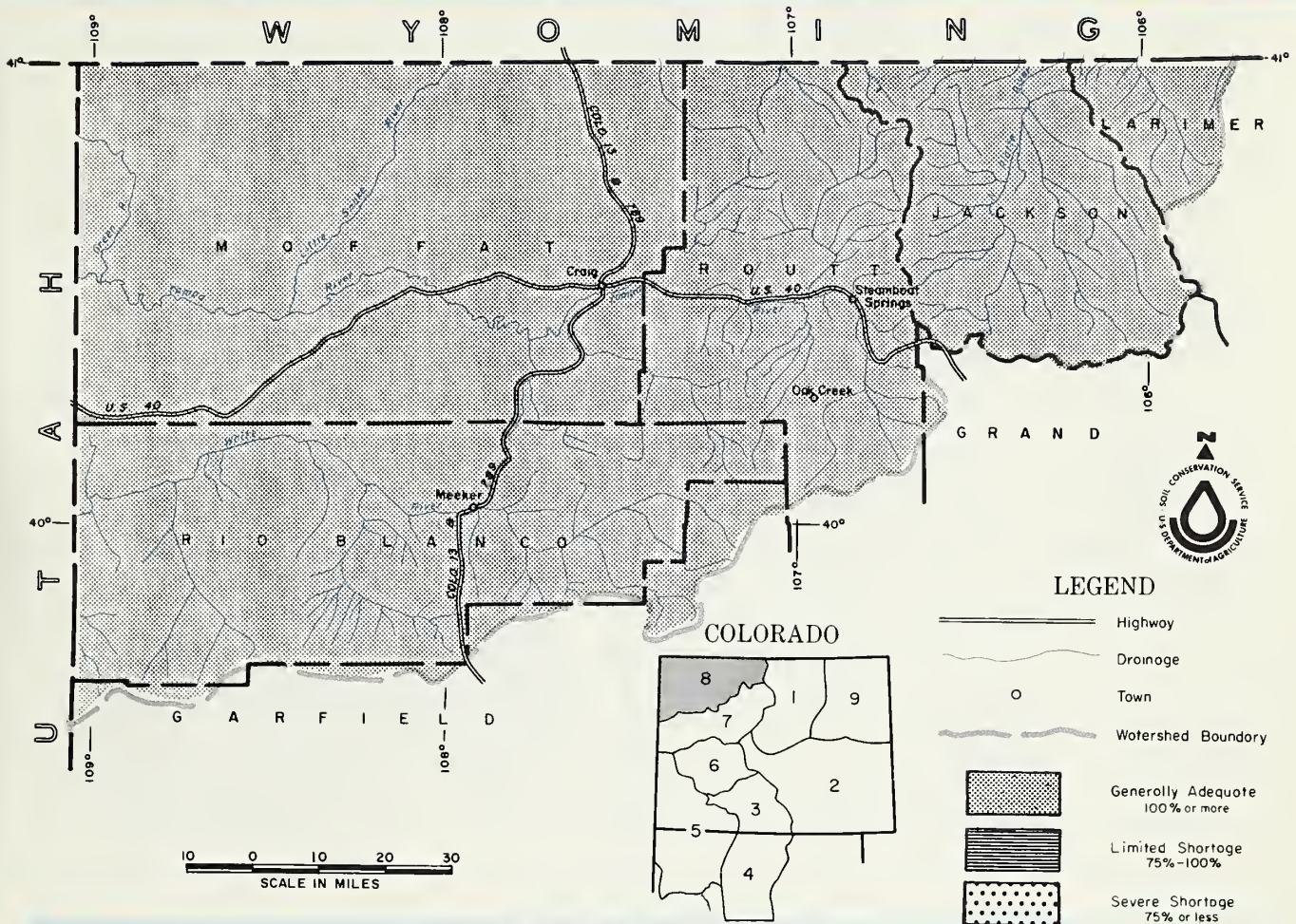
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# WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE YAMPA, WHITE, AND NORTH PLATTE RIVER WATERSHEDS IN COLORADO

as of  
May 1, 1973

**U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE**  
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



## YOUR WATER SUPPLY

WATER SUPPLY FORECASTS WERE UP SLIGHTLY IN THIS AREA. SNOWFALL WAS ABOVE NORMAL OVER THE BASIN. STREAMS ARE STARTING TO RISE. SMALL TRIBUTARY STREAMS SHOULD BE EXCELLENT IN THE EARLY PART OF THE SEASON AND AT LEAST ADEQUATE LATER. SOILS ARE EXTREMELY WET IN SOME LOCATIONS, PREVENTING PLANTING. MOUNTAIN SOILS CONTAIN ABOUT NORMAL AMOUNTS OF MOISTURE.

This report prepared by

JACK N. WASHICHEK and RONALD E. MORELAND  
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE  
DENVER, COLORADO

Issued by

M. O. BURDICK—STATE CONSERVATIONIST R. L. PORTER—AREA CONSERVATIONIST  
U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE  
DENVER, COLORADO GLENWOOD SPRINGS, COLORADO

*The Conservation of Water begins with the Snow Survey*



# STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORECAST	% of Average	Average <sup>+</sup>
Elk at Clark	200	105	191
Laramie at Jelm	70	115	61
Little Snake at Lily	285	103	277
North Platte at Northgate	277	129	215
White nr Meeker	320	109	293
Yampa nr Maybell	940	110	853
Yampa at Steamboat Springs	290	112	260

# WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Canadian River	Exc.	Avg.
Hunt Creek	Exc.	Avg.
Illinois River	Exc.	Avg.
Michigan River	Exc.	Avg.
Oak Creek	Exc.	Avg.
Trout Creek	Exc.	Avg.

## SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average <sup>+</sup>
Elk	3	280	154
Laramie	3	121	132
North Platte	5	146	135
White	2	227	145
Yampa	6	156	136

## SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average <sup>+</sup>
Laramie	2	71	75
North Platte	2	78	99
Yampa	1	101	129

+ 1953-1967 period.

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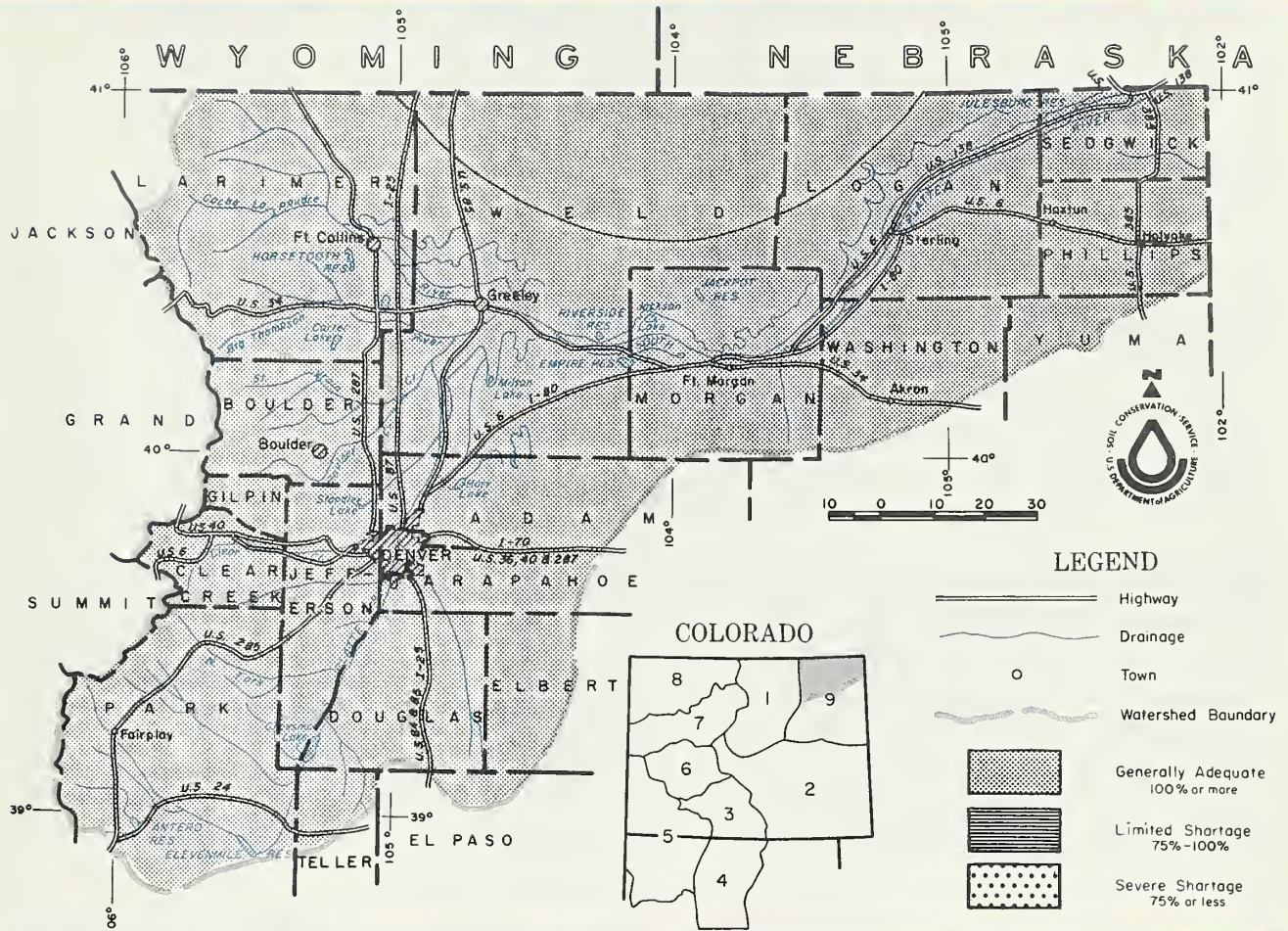
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## YOUR WATER SUPPLY

STREAMFLOWS SHOULD BE NEAR AVERAGE FOR THE LOWER SOUTH PLATTE THIS SUMMER. FORECASTS WERE RAISED SLIGHTLY ON THE MAINSTEM AND ALL THE NORTHERN TRIBUTARIES. LOW ELEVATION SNOW IS EXTREMELY HIGH FOR THIS TIME OF YEAR. CARRY-OVER STORAGE IS 118 PERCENT OF AVERAGE AND JUST ABOUT THE SAME AS LAST YEAR AT THIS TIME. SOILS ARE WET.

*This report prepared by* \_\_\_\_\_  
JACK N. WASHICHEK and RONALD E. MORELAND  
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE  
DENVER, COLORADO

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

### *The Conservation of Water begins with the Snow Survey*



# STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

# WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

FORECAST POINT	FORECAST	% of Average	Average <sup>+</sup>
Big Thompson at Drake (1)	95	95	100
Boulder at Orodell	48	99	49
Cache La Poudre at Canyon Mouth (2)	220	102	215
Clear Creek at Golden (3)	120	101	119
Saint Vrain at Lyons (4)	70	100	70

STREAM or AREA	Flow Period	
	Spring Season	Late Season
South Platte from Greeley to Fort Morgan	Exc.	Avg.
South Platte from Fort Morgan to Sterling	Exc.	Avg.
South Platte below Sterling	Exc.	Avg.

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow minus diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

## SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average <sup>+</sup>
Big Thompson	4	104	109
Boulder	3	159	132
Cache La Poudre	8	144	166
Clear Creek	6	131	106
Saint Vrain	3	183	148
South Platte	3	100	122

## SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average <sup>+</sup>
Big Thompson	2	86	83
Boulder	1	87	118
Cache La Poudre	2	71	75
Clear Creek	2	91	94
Saint Vrain	2	77	95
South Platte	2	87	87

## RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average <sup>+</sup>
Carter	108.9	106.0	107.2	86.4
Cheesman	79.0	56.5	74.0	50.2
Eleven Mile	97.8	91.7	81.0	72.9
Empire	37.7	34.0	33.1	29.0
Horsetooth	143.5	130.0	134.0	116.9

## RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average <sup>+</sup>
Jackson	35.4	34.7	33.7	33.7
Julesburg	28.2	23.1	23.6	22.1
Prewitt	32.8	28.6	25.6	17.5
Point of Rocks	70.0	70.6	63.2	60.8
Riverside	57.5	59.9	58.6	51.0

+ 1953-1967 period.

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# APPENDIX I

## SNOW COURSE MEASUREMENTS as of May 1, 1973

SNOW COURSE	CURRENT INFORMATION			PAST RECORD	
	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES)	
				LAST YEAR	AVG. 53-67
NORTH PLATTE BASIN					
<u>Laramie River</u>					
Deadman Hill	5/2	65	20.9	19.5	17.1
McIntyre	4/26	50	13.9	10.7	9.4
Roach	4/27	76	25.0	19.1	18.7
<u>North Platte River</u>					
Cameron Pass	4/30	93	36.9	32.6	28.4
Columbine Lodge	4/26	57	21.0	18.9	21.4
Northgate	4/30	28	9.0	0.3	2.7
Park View	4/26	41	11.2	3.3	5.6
Willow Cr. Pass (B)	4/26	47	13.7	7.8	10.0
SOUTH PLATTE BASIN					
<u>Boulder Creek</u>					
Baltimore	4/27	32	10.0	0.5	2.9
Boulder Falls	4/28	52	15.9	9.9	11.9
University Camp	4/28	63	20.9	19.0	20.7
<u>Big Thompson River</u>					
Deer Ridge	4/27	22	6.5	0.1	2.6
Hidden Valley	NS			8.5	12.0
Lake Irene (B)	4/28	68	23.1	24.0	22.4
Long's Peak	4/25	54	13.5	12.2	12.0
Two Mile	4/27	58	15.7	20.0	17.0
<u>Cache La Poudre</u>					
Bennett Creek	4/26	45	12.5	1.0	---
Big South	4/26	9	3.2	1.9	0.6
Cameron Pass	4/30	93	36.9	32.6	28.4
Chambers Lake	4/26	33	12.2	4.9	5.3
Deadman Hill	5/2	65	20.9	19.5	17.1
Hour Glass Lake	4/26	42	11.3	4.9	5.6
Joe Wright	4/30	86	31.8	27.8	---
Lost Lake	4/26	41	12.2	13.0	8.9
Pine Creek	5/2	19	6.3	0.5	0.1
Red Feather	5/2	41	13.9	5.9	4.4
<u>Clear Creek</u>					
Baltimore	4/27	22	6.5	0.5	2.9
Berthoud Falls	4/27	51	16.9	9.5	12.1
Empire	4/27	31	9.5	2.3	6.8
Grizzly Peak (B)	4/26	60	16.5	21.0	19.4
Loveland Lift	4/27	71	20.8	16.1	25.3
Loveland Pass	4/27	50	15.7	16.0	14.5
<u>Saint Vrain River</u>					
Copeland Lake	4/27	24	6.1	0.6	1.7
Ward	4/27	39	10.3	2.0	5.4
Wild Basin	4/27	46	12.1	13.0	12.2
<u>South Platte River</u>					
Como	4/25	34	9.0	3.6	---
Geneva Park	4/30	19	3.9	1.3	1.2
Horseshoe Mountain	4/24	40	10.5	12.6	---
Hoosier Pass	4/25	44	11.2	14.2	12.0
Jefferson Creek	4/26	38	9.7	9.4	7.1
Mosquito	4/25	38	10.9	3.5	---
Trout Creek Pass	4/24	27	7.1	0.0	---
ARKANSAS BASIN					
<u>Arkansas River</u>					
Bigelow Divide	4/26	45	13.1	0.0	2.2
Cooper Hill (B)	4/27	51	11.0	10.8	11.1
East Fork	4/30	32	8.7	6.8	7.4
Four Mile Park	4/30	7	1.9	0.0	1.0
Fremont Pass	4/30	56	17.4	18.9	17.9
Garfield	4/27	47	17.8	5.2	8.5
Hermit Lake	4/25	38	10.4	0.0	---
Monarch Pass	4/27	59	20.6	13.1	16.5
Tennessee Pass	4/30	39	7.1	8.2	7.7
Twin Lakes Tunnel	4/27	36	12.9	12.1	8.7
Westcliffe	4/25	23	6.2	0.0	1.0

SNOW COURSE	CURRENT INFORMATION			PAST RECORD	
	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES)	
				LAST YEAR	AVG. 53-67
<u>Cucharas River</u>					
Blue Lakes	4/27	27	11.3	0.0	0.5
Cucharas Pass	4/27	48	17.4	0.0	---
La Veta Pass (B)	4/27	43	17.5	0.0	1.6
<u>Purgatoire River</u>					
Bourbon	4/26	40	9.2	0.0	1.7
<b>RIO GRANDE BASIN-COLO</b>					
<u>Alamosa River</u>					
Silver Lakes	4/25	32	9.0	0.0	0.6
Summitville	4/26	83	29.5	16.6	19.0
<u>Conejos River</u>					
Cumbres	5/2	68	29.8	0.0	12.6
LaManga	5/2	74	30.0	4.1	---
Platoro	4/29	58	19.8	1.7	9.9
River Springs	5/1	10	3.7	0.0	0.5
<u>Culebra River</u>					
Brown Cabin	4/28	29	8.2	---	---
Cottonwood (B)	NS			---	---
Culebra	4/24	48	14.4	0.0	3.5
La Veta Pass (B)	4/27	43	17.5	0.0	1.6
Trinchera (B)	4/28	47	15.3	---	---
<u>Rio Grande</u>					
Cochetopa Pass	4/26	31	8.9	1.1	2.6
Grayback	5/1	70	21.2	2.7	---
Hiway	4/30	91	35.5	21.0	28.1
Lake Humphrey	4/27	27	8.4	0.5	0.4
Love Lake	4/27	48	13.3	0.0	---
Pass Creek	4/30	39	13.2	0.0	3.9
Pool Table	4/27	32	7.9	0.3	1.9
Porcupine	4/28	39	10.0	2.6	6.6
Santa Maria	4/27	18	4.4	0.0	0.5
Upper Rio Grande	4/27	42	12.7	0.0	1.8
Wolf Creek Pass	4/30	84	36.9	5.3	22.0
Wolf Cr. Summit (B)	4/30	113	44.9	27.9	30.0
<b>SAN JUAN-DOLORES</b>					
<u>Animas River</u>					
Cascade	4/26	42	17.5	0.0	3.6
Lemon	4/27	30	12.1	0.0	---
Mineral Creek	4/26	61	21.5	3.6	10.5
Molas Lake	4/26	44	14.9	1.2	6.8
Purgatory	4/27	80	33.1	10.8	---
Red Mt. Pass (B)	4/26	102	39.6	28.3	30.3
Silverton Sub-Sta.	4/26	23	10.5	0.0	0.1
Spud Mountain	4/26	83	35.8	11.3	22.2
<u>Dolores River</u>					
Lizzard Head	4/29	58	22.8	3.1	12.9
Lone Cone	4/30	43	18.4	0.9	---
Rico	4/29	23	9.4	0.0	0.4
Telluride	4/27	28	9.9	0.0	0.8
Trout Lake	4/27	52	19.2	0.3	8.5
<u>San Juan River</u>					
Chama Divide (B)	5/2	0	0.0	0.0	---
Chamita (B)	5/2	0	0.0	0.0	---
Upper San Juan	4/30	97	42.2	7.9	26.6
Wolf Creek Pass (B)	4/30	84	36.9	5.3	22.0
Wolf Cr. Summit	4/30	113	44.9	27.9	30.0

NOTE: NS - No Survey  
(B) - On Adjacent Drainage



# APPENDIX I

## SNOW COURSE MEASUREMENTS as of May 1, 1973

SNOW COURSE	CURRENT INFORMATION			PAST RECORD	
	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES)	
				LAST YEAR	AVG. '53 '67
GUNNISON BASIN					
Gunnison River					
Alexander Lake	4/27	78	31.2	14.5	21.0
Blue Mesa	4/27	22	6.6	0.0	1.9
Butte	4/27	48	14.2	11.3	---
Cochetopa Pass (B)	4/26	31	8.9	1.1	2.6
Crested Butte	4/27	32	12.8	0.2	7.1
Keystone	4/27	58	21.9	15.1	17.1
Lake City	4/25	33	8.0	1.2	3.5
Mesa Lakes (B)	4/27	67	28.9	8.2	15.1
McClure Pass	4/26	50	20.1	0.0	9.3
Park Cone	4/26	31	8.3	4.4	7.7
Park Reservoir	4/30	79	31.2	15.8	23.6
Porphyry Creek	4/27	66	22.5	11.5	16.5
Tomichi	4/27	49	16.5	7.4	10.0
Surface Creek					
Alexander Lake	4/27	78	31.2	14.5	21.0
Mesa Lakes (B)	4/27	67	28.9	8.2	15.1
Park Reservoir	4/30	79	31.2	15.8	23.6
Uncompahgre River					
Ironton Park	4/27	48	17.3	0.0	6.7
Red Mountain Pass	4/26	102	39.6	28.3	30.3
Telluride (B)	4/27	28	9.9	0.0	0.8
COLORADO BASIN (Main)					
Blue River					
Blue River	4/25	35	9.0	4.1	6.4
Fremont Pass	4/30	56	17.4	18.9	17.9
Frisco	4/26	28	8.0	2.4	4.6
Grizzly Peak	4/26	60	16.5	21.0	19.4
Hoosier Pass (B)	4/25	44	11.2	14.2	12.0
Shrine Pass	4/26	67	19.1	23.3	18.7
Snake River	4/26	18	5.3	1.0	3.5
Summit Ranch	4/27	26	6.9	4.8	4.8
Colorado River					
Arrow	4/27	44	15.0	10.0	9.2
Berthoud Pass	4/25	58	18.0	17.4	14.3
Berthoud Summit	4/27	72	21.7	22.0	20.6
Cooper Hill	4/27	51	11.0	10.8	11.1
Fiddler Gulch	4/27	59	13.6	11.6	14.7
Glenmar Ranch	4/26	28	10.0	1.3	3.8
Gore Pass	4/27	34	10.2	6.8	7.3
Grand Lake	4/29	28	8.3	2.3	3.4
Lake Irene	4/28	68	23.1	24.0	22.4
Lapland	4/26	38	10.4	8.6	6.9
Lulu	4/29	69	22.3	23.4	18.3
Lynx Pass	4/27	43	13.9	6.1	7.1
McKenzie Gulch	4/25	25	7.6	0.5	0.6
Middle Fork	4/26	33	10.4	2.9	5.7
Milner	4/28	40	11.9	10.8	12.0
North Inlet	4/28	31	8.9	3.6	5.9
Pando	4/30	33	11.2	7.0	7.7
Phantom Valley	4/28	31	9.8	1.7	6.2
Ranch Creek	4/27	43	12.3	10.0	9.0
Tennessee Pass (B)	4/30	39	7.1	8.2	7.7
Vail Pass	4/26	55	16.8	14.2	15.0
Vasquez	4/25	45	13.5	13.1	12.4

SNOW COURSE	CURRENT INFORMATION			PAST RECORD	
	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES)	
				LAST YEAR	AVG. '53 '67
<u>Roaring Fork River</u>					
Aspen	4/28	59	21.0	21.7	16.0
Chapman	4/27	48	15.1	14.6	---
Independence Pass	4/27	55	17.9	15.1	16.2
Ivanhoe	4/27	68	23.3	21.0	17.3
Kiln	4/27	44	12.9	13.8	---
Last Chance	4/27	48	15.3	14.4	---
Lift	4/28	62	22.2	17.7	18.0
McClure Pass	4/26	50	20.1	0.0	9.3
Nast	4/27	22	7.1	0.0	1.8
North Lost Trail	4/26	45	17.8	2.5	7.5
<u>Williams Fork River</u>					
Glenmar Ranch	4/26	28	10.0	1.3	3.8
Jones Pass	4/26	57	17.2	18.0	15.4
Middle Fork	4/26	33	10.4	2.9	5.7
<u>Willow Creek</u>					
Granby	4/26	21	5.7	2.5	3.6
Willow Creek Pass	4/26	47	13.7	7.8	10.0
<u>Plateau Creek</u>					
Mesa Lakes	4/27	67	28.9	8.2	15.1
Park Reservoir	4/30	79	31.2	15.8	23.6
Trickle Divide	4/30	84	34.3	20.5	26.5
YAMPA BASIN					
<u>Elk River</u>					
Clark	4/25	22	8.4	0.0	3.1
Elk River	4/25	51	17.4	11.9	13.6
Hahn's Peak	4/25	33	12.0	1.6	7.8
<u>White River</u>					
Burro Mountain	4/26	61	20.7	8.8	14.5
Rio Blanco	4/25	44	13.6	6.3	9.1
<u>Yampa River</u>					
Bear River	4/30	30	10.0	4.9	7.4
Buffalo Pass	4/27	116	46.3	51.9	---
Columbine (B)	4/26	57	21.0	18.9	21.4
Dry Lake	4/25	60	21.9	14.0	15.2
Lynx Pass (B)	4/27	43	13.9	6.1	7.1
Rabbit Ears	4/26	93	30.9	26.9	25.9
Yampa View	4/26	52	18.4	3.8	8.4
Crosho	4/30	43	13.6	11.2	---
RIO GRANDE BASIN-NM					
<u>Pecos River</u>					
Panchuela	4/27	16	5.3	---	---
<u>Rio Grande</u>					
Big Tesuque	4/26	29	10.8	---	---
Hopewell	4/27	56	21.7	---	---
Rio En Medio	4/26	48	17.5	---	---
Sandoval	4/27	31	10.9	---	---
Taos Canyon	4/27	22	7.8	---	---
Tres Ritos	4/27	15	5.7	---	---
<u>Red River</u>					
Red River	4/27	29	10.0	---	---

NOTE: NS - No Survey  
(B) - On Adjacent Drainage

# APPENDIX II

SOIL MOISTURE MEASUREMENTS as of May 1, 1973

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
NORTH PLATTE BASIN					
<u>North Platte River</u>					
Muddy Pass	4/26/73	11.1	8.5	10.7	8.6
Willow Pass	4/26/73	9.5	7.3	9.4	7.3
SOUTH PLATTE BASIN					
<u>Boulder Creek</u>					
Alpine Camp	4/26/73	6.9	5.2	6.0	4.4
<u>Big Thompson River</u>					
Beaver Dam	4/27/73	7.1	3.6	5.4	4.9
Guard Station	4/26/73	6.9	3.2	---	4.5
Two Mile	4/27/73	9.1	4.9	4.5	5.4
<u>Clear Creek</u>					
Clear Creek	4/27/73	9.5	5.8	6.4	6.2
Hoop Creek	4/27/73	4.9	3.0	3.3	3.2
<u>Cache La Poudre River</u>					
Feather	5/2/73	10.1	5.5	9.7	8.1
Laramie Road	4/26/73	12.4	7.1	8.1	8.7
<u>South Platte River</u>					
Hoosier Pass	4/25/73	7.8	4.4	5.0	5.4
Kenosha Pass	4/26/73	4.4	3.4	4.0	3.6
ARKANSAS BASIN					
<u>Arkansas River</u>					
Garfield	4/27/73	6.7	5.6	4.2	4.7
Leadville	4/30/73	7.8	4.1	3.0	4.6
Twin Lakes Tunnel	4/30/73	4.5	3.0	2.5	2.9
RIO GRANDE BASIN - COLORADO					
<u>Conejos River</u>					
Mogote	4/23/73	10.7	6.2	6.8	8.5
<u>Rio Grande</u>					
Bristol View	4/27/73	6.1	5.4	5.9	4.9
La Veta Pass	4/23/73	11.9	9.5	10.1	11.5
ANIMAS-SAN JUAN BASINS					
<u>Animas River</u>					
Cascade	4/26/73	9.1	6.2	5.5	7.1
Mineral Creek	4/26/73	5.7	3.0	3.2	4.2
Molas Lake	4/26/73	9.4	6.4	6.7	6.5
<u>Dolores River</u>					
Dolores	4/29/73	19.6	19.0	3.3	11.5
Lizzard Head	4/29/73	11.8	2.6	4.8	7.3
Rico	4/29/73	13.8	8.4	8.7	9.9
GUNNISON BASIN					
<u>Gunnison River</u>					
King	4/27/73	3.3	2.9	2.3	2.3
COLORADO BASIN (MAINSTEM)					
<u>Blue River</u>					
Blue River	4/25/73	4.2	3.4	2.9	3.0
<u>Colorado River</u>					
Berthoud Pass	4/25/73	3.9	3.1	3.1	3.0
Gore	4/27/73	4.9	3.0	4.5	4.2
Grand Mesa	4/30/73	12.5	13.3	12.1	10.9
Ranch Creek	4/27/73	8.7	5.8	6.0	6.2
Vail	4/26/73	12.3	8.9	8.9	10.2
<u>Roaring Fork River</u>					
Placita	4/26/73	9.3	7.6	8.0	7.6
YAMPA BASIN					
<u>Yampa River</u>					
Hahn's Peak	4/25/73	19.0	12.3	12.2	9.5

ALL PROFILES 4 FEET DEEP





# LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

## STATE

Colorado State Engineer  
New Mexico State Engineer  
Nebraska State Engineer  
Colorado State University Experiment Station  
Rocky Mountain Forest and Range Experiment Station

## FEDERAL

Department of Agriculture

Forest Service  
Soil Conservation Service

Department of Interior

Bureau of Reclamation  
Geological Survey  
National Park Service  
Indian Service

Department of Commerce

NOAA, National Weather Service

Defence Department

Army Engineer Corps

Atomic Energy Commission

## INVESTOR OWNED UTILITIES

Colorado Public Service Company  
Public Service Company of New Mexico

## MUNICIPALITIES

City of Denver	City of Greeley
City of Boulder	City of Fort Collins

## WATER USERS ORGANIZATIONS

Arkansas Valley Ditch Association  
Colorado River Water Conservation District

## IRRIGATION PROJECTS

Farmers Reservoir and Irrigation Company  
San Luis Valley Irrigation District  
Santa Maria Reservoir Company  
Costilla Land Company  
Uncompahgre Valley Water Users' Association  
Twin Lakes Reservoir and Canal Company  
Trinchera Irrigation Co.



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